

Title (en)
MAGNETIC HINGE FOR AN OVEN DOOR

Title (de)
MAGNETSCHARNIER FÜR EINE OFENTÜR

Title (fr)
CHARNIÈRE MAGNÉTIQUE POUR UNE PORTE DE FOUR

Publication
EP 2952666 B1 20180620 (EN)

Application
EP 15167649 A 20150513

Priority
US 201414294183 A 20140603

Abstract (en)
[origin: EP2952666A1] A hinge (10) for rotatably coupling an appliance door (12) with an appliance body (16) includes a housing (18) affixable within the door (12). An input arm (20) is rotatably coupled to the housing (18) and is affixable with the appliance body (16). A spring (24) is operably engaged between the housing (18) and the input arm (20) to apply a balancing torque to the input arm (20) relative to the housing (18). A first magnet (26) is fixed relative to the housing (18) and a second magnet (28) is operatively coupled with the input arm (20) such that rotation of the input arm (20) with respect to the housing (18) moves the second magnet (28) axially with respect to the first magnet (26). The magnets have a mutual attraction between each other that is operable to apply a closing torque to the input arm (20) relative to the housing (18). The balancing torque decreases with movement of the input arm (20) from the second position toward the first position.

IPC 8 full level
E05F 1/12 (2006.01)

CPC (source: EP US)
E05C 19/16 (2013.01 - US); **E05D 7/00** (2013.01 - US); **E05D 11/0054** (2013.01 - US); **E05D 11/1064** (2013.01 - US); **E05F 1/00** (2013.01 - US); **E05F 1/1261** (2013.01 - EP US); **F16B 1/00** (2013.01 - US); **E05D 2011/0072** (2013.01 - US); **E05Y 2201/46** (2013.01 - EP US); **E05Y 2900/308** (2013.01 - EP US); **F16B 2200/83** (2023.08 - US)

Citation (examination)
WO 2007028400 A1 20070315 - PAULI & SOHN GMBH METALLWAREN [DE], et al

Cited by
CN111005634A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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DOCDB simple family (application)
EP 15167649 A 20150513; US 201414294183 A 20140603; US 201514923562 A 20151027